Atty. Docket No. LeA 35 926

Serial No. 10/521,538

## Amended Claims (Attorney Docket No. Le 35 926)

## 1. (Currently amended) A compound of the formula

in which

R<sup>1</sup> is C<sub>6</sub>-C<sub>10</sub>-aryl or 5- to 10-membered heteroaryl which are optionally substituted by radicals selected from the group of halogen, cyano, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, trifluoromethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, C<sub>1</sub>-C<sub>4</sub>-alkyl and C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, where C<sub>1</sub>-C<sub>4</sub>-alkyl is optionally substituted by hydroxy,

or a group of the formula

or

4- to 12-membered heterocyclyl which is bonded via a nitrogen atom and which is optionally substituted by radicals selected from the group of -NHR<sup>2</sup>, halogen, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkyl and oxo, where C<sub>1</sub>-C<sub>6</sub>-alkyl is optionally substituted by hydroxy, and

or

 $C_4$ - $C_8$ -cycloalkyl which is substituted in the position adjacent to the point of attachment by oxo, and which is optionally substituted by  $C_1$ - $C_4$ -alkyl,

and the or a salt salts, solvates and/or solvates of the salts thereof.

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- 2. (Currently amended) The compound as claimed in claim 1, where
  - is phenyl or 5- to 6-membered heteroaryl, which are optionally substituted by radicals selected from the group of fluorine, chlorine, cyano, C<sub>1</sub>-C<sub>3</sub>-alkoxycarbonyl, C<sub>1</sub>-C<sub>3</sub>-alkoxy, trifluoromethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, C<sub>1</sub>-C<sub>3</sub>-alkyl and C<sub>3</sub>-C<sub>5</sub>-cycloalkyl, where C<sub>1</sub>-C<sub>3</sub>-alkyl is optionally substituted by hydroxy,
  - or a group of the formula

$$+$$

OF

4- to 12-membered heterocyclyl which is bonded via a nitrogen atom and which is optionally substituted by radicals selected from the group of -NHR<sup>2</sup>, fluorine, chlorine, C<sub>1</sub>-C<sub>3</sub>-alkyl, C<sub>1</sub>-C<sub>3</sub>-alkoxycarbonyl, C<sub>1</sub>-C<sub>3</sub>-alkoxy and oxo, where C<sub>1</sub>-C<sub>3</sub>-alkyl is optionally substituted by hydroxy,

and

 $R^2$  is  $C_1$ - $C_3$ -alkyl,

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cyclohexyl which is substituted in the position adjacent to the point of attachment by oxo, and which is optionally substituted by  $C_1$ - $C_2$ -alkyl,

and the or a salt salts, solvates and/or solvates of the salts thereof.

- 3. (Currently amended) The compound as claimed in claim 1 or 2, where
  - R<sup>1</sup> is phenyl or pyridyl, pyrazolyl, isoxazolyl, which are optionally substituted by radicals selected from the group of fluorine, chlorine, cyano, methoxy, methoxycarbonyl, ethoxycarbonyl, trifluoromethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, methyl, cyclopropyl or hydroxymethyl,
  - or a group of the formula

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OF

4- to 12-membered heterocyclyl which is bonded via a nitrogen atom and which is optionally substituted by radicals selected from the group of  $-NHR^2$ , fluorine, chlorine,  $C_1-C_3$ -alkyl, methoxy, ethoxy, hydroxymethyl and oxo, and

R<sup>2</sup> is methyl,

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cyclohexyl which is substituted in the position adjacent to the point of attachment by oxo, and which is optionally substituted by methyl,

and the or a salt salts, solvates and/or solvates of the salts thereof.

- 4. (Currently amended) A process for preparing compounds of the formula (IV), (VI) and (VII), characterized in that either
  - [A] compounds of the formula

in which X is chlorine, bromine, iodine.

are reacted with a compound of the formula

R3-NH-R4

in which

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R<sup>3</sup>, R<sup>4</sup> together with the nitrogen atom to which they are bonded are a 4- to 12-membered heterocyclyl which is optionally substituted by radicals selected from the group of - NHR<sup>2</sup>, halogen, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkyl and oxo, where C<sub>1</sub>-C<sub>6</sub>-alkyl is optionally substituted by -OR<sup>5</sup>, and R<sup>2</sup> has the meaning indicated in claim 1, R<sup>5</sup> is a hydroxy protective group in an inert solvent in the presence of a base and of a transition metal catalyst to give compounds of the formula

or

[B] compounds of the formula (II) are reacted with a compound of the formula

in which

is cycloalkyl, R<sup>7</sup> is hydrogen or R<sup>6</sup> and R<sup>7</sup> together with the CH<sub>2</sub>CO group to which they are bonded are cycloalkyl which may be substituted by C<sub>1</sub>-C<sub>6</sub>-alkyl radicals, in an inert solvent in the presence of a base and of a transition metal catalyst to give compounds of the formula

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[C] compounds of the formula (II) are reacted with a compound of the formula

in which

A is  $-B(OR^9)_2$  or  $-Sn(C_1-C_6-alkyl)_3$ , where

R<sup>9</sup> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or two radicals together form a -CH<sub>2</sub>CH<sub>2</sub>- or -(CH<sub>3</sub>)<sub>2</sub>C-C(CH<sub>3</sub>)<sub>2</sub>- bridge,

and

R<sup>8</sup> is C<sub>6</sub>-C<sub>10</sub>-aryl or 5- to 10-membered heteroaryl which are optionally substituted by radicals selected from the group of halogen, cyano, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, trifluoromethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, C<sub>1</sub>-C<sub>4</sub>-alkyl and C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, where C<sub>1</sub>-C<sub>4</sub>-alkyl is optionally substituted by hydroxy,

or a group of the formula

in an inert solvent in the presence of a base and of a transition metal catalyst to give compounds of the formula

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and the resulting compounds of the formula (IV), (VI) and (VIII) are optionally reacted with the appropriate (i) solvents and/or (ii) bases or acids to give the solvates, salt salts, or solvates of the salts thereof.

- 5. (Cancelled).
- (Previously presented) A medicament comprising at least one of the compounds as claimed in claim
  1 mixed together with at least one pharmaceutically acceptable, essentially nontoxic carrier or
  excipient.
- 7. (Cancelled).
- 8. (Currently amended) A method for the treatment and/or prophylaxis of disorders of perception, concentration, learning and/or memory comprising administering to a human or animal an effective amount of a compound of claim 1.
- 9. (Cancelled).
- 10. (Currently amended) A method for the treatment and/or prophylaxis of disorders of perception, econcentration, learning and/or memory diseases comprising administering to a human or animal an effective amount of a medicament of claim 6.
- 11. (Currently amended) A method for controlling disorders of perception, concentration, learning and/or memory in humans or animals comprising administering to a human or animal an effective amount of a compound of claim 1.
- 12. (Currently amended) The method process of claim 4, wherein X is bromine.